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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/511,258

10/13/2004

Mark Thomas Johnson

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07/03/2007

PHILIPS ELECTRONICS NORTH AMERICA CORPORATION  
INTELLECTUAL PROPERTY & STANDARDS  
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EXAMINER

HOLTON, STEVEN E

ART UNIT

PAPER NUMBER

2629

MAIL DATE

DELIVERY MODE

07/03/2007

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	10/511,258	JOHNSON ET AL.	
	<b>Examiner</b>	<b>Art Unit</b>	
	Steven E. Holton	2629	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 13 October 2004.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1-12 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-5 and 9-12 is/are rejected.
- 7) ☒ Claim(s) 6-8 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                  | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

## **DETAILED ACTION**

### ***Information Disclosure Statement***

1. The listing of references in the specification is not a proper information disclosure statement. 37 CFR 1.98(b) requires a list of all patents, publications, or other information submitted for consideration by the Office, and MPEP § 609.04(a) states, "the list may not be incorporated into the specification but must be submitted in a separate paper." Therefore, unless the references have been cited by the examiner on form PTO-892, they have not been considered.

### ***Specification***

2. The disclosure is objected to because of the following informalities:

The disclosure lacks required headings within the text. Headings such as: Background of the Invention, Summary of the Invention, Brief Description of the Drawings, etc. are required within the specification. The current disclosure possesses these sections within the text, but lacks the required headings to differentiate the different sections.

Appropriate correction is required.

### ***Claim Rejections - 35 USC § 112***

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

3. Claim 3 recites the limitation "means for sensing the change in said impedance measure impedances..." in lines 1 and 2. There is insufficient antecedent basis for this

limitation in the claim. Claim 2 discusses measuring impedances, but claim 1 does not specify the type of electrical characteristic being measured.

4. Claim 9 recites the limitation "the nonlinear resistive part of the spacing means" in lines 1 and 2. There is insufficient antecedent basis for this limitation in the claim. Claim 8 recites a piezoelectric part; whereas claims 6 and 7 recite the nonlinear resistive part.

### ***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

5. Claims 1-5 and 10-12 are rejected under 35 U.S.C. 102(e) as being anticipated by Kurihara et al. (USPN: 6501529), hereinafter Kurihara.

Regarding claim 1, Kurihara discloses a touch sensitive display device including "multiple pixel elements (Fig. 5, elements 15) between two substrates (Fig. 4, elements 14 and 17), having spacing means between the substrates (Fig. 4, elements 23, 24, 26, and 27) and means for applying driving voltages to at least one of said picture elements (Fig. 5, element 29) together with means for monitoring the electrical characteristics of at least one of said picture elements or the electrical characteristics of the spacing

means (col. 8, line 18 – col. 9, line 4) and sensing a change in said electrical characteristics; the spacing means being part of said means for monitoring the electrical characteristics (Fig. 4, elements 24 and 27; col. 8, line 18 – col. 9, line 4).”

Regarding claim 2, Kurihara discloses means for monitoring the impedance of the spacing portion of the each pixel element and using the spacing means for monitoring the impedance changes (col. 3, lines 46-58; col. 4, lines 27-48; col. 8, line 18- col. 9, line 4). The Examiner defines the spacer and sensor wiring as part of the picture elements because each picture element is formed with part of the spacing and sensors adjacent to each pixel electrode and picture element.

Regarding claim 3, Kurihara discloses measuring the change of impedance of multiple picture elements at the same time (Fig. 10, elements T1-T4; col. 8, line 18 – col. 9, line 4).

Regarding claim 4, Kurihara discloses the spacing part having a conducting part (Fig. 4, elements 24 and 27).

Regarding claim 5, Kurihara discloses the conducting parts forming a grid of strips (Fig. 7, elements 27; col. 3, lines 46 – 58).

Regarding claims 10-12 Kurihara discloses measuring the electrical characteristics of multiple touches at a single time (Fig. 10, elements T1-T4) and discloses that more points can be considered at a time (col. 8, lines 42 –43). In order to determine the locations of touch points T1 – T4 Kurihara is measuring at least one row and one column of elements at the same time to measure the entire block of touch points (col. 8, lines 18-33).

***Allowable Subject Matter***

6. Claims 6-8 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Claim 9 would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 112, 2nd paragraph, set forth in this Office action and to include all of the limitations of the base claim and any intervening claims.

The following is a statement of reasons for the indication of allowable subject matter:

The present invention is directed to a display device with touch sensors incorporated within each picture element within the spacing elements. Dependent claim 6 identifies the uniquely distinct features "the spacing means at least have a nonlinear resistive part". The closest prior art, Kurihara discloses a display using linear resistive strips within the spacer materials and fails to anticipate or render the above underlined limitations obvious.

Dependent claim 8 identifies the uniquely distinct features "the spacing means comprise a piezoelectric part". The closest prior art, Kurihara discloses a display using linear resistive strips within the spacers and fails to anticipate or render the above underline limitations obvious.

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Steven E. Holton whose telephone number is (571) 272-7903. The examiner can normally be reached on M-F 8:30-5.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Amr Awad can be reached on (571) 272-7764. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Steven E. Holton  
Division 2629  
June 23, 2007

AMR A. AWAD  
SENIOR PATENT EXAMINER  
